REMARKS

By this Amendment, Applicant amends claims 1-9, 12, 16, and 17 to more appropriately define the subject matter claimed therein and adds new claims 29 and 30 to protect additional aspects of the invention.

In the Office Action of January 2, 2004¹ ("OA"), claims 1, 2, 4, 5, 7, 8, 10, 11, and 27 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,484,027 to *Mauney*; claims 21, 22, 24, and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Mauney*; and claims 3, 6, 9, 12-20, 23, 26, and 28 were rejected under 35 U.S.C. § 103(a) as unpatentable over *Mauney* in view of U.S. Pat. No. 6,456,856 to *Werling et al.* ("*Werling*"). The rejections set forth in the Office Action should be withdrawn, and the new claims should be allowed, for the reasons discussed below.

Rejection of claims 1, 2, 4, 5, 7, 8, 10, 11, and 27 under 35 U.S.C. § 102(e)

Initially, Applicant points out that the rejection of claim 27 under 35 U.S.C. § 102(e) is ambiguous. The Examiner states: "claim 27...is rejected for the same reasoning set forth in claim 21." Claim 21, however, is rejected under 35 U.S.C. § 103(a). Applicant cannot discern whether the Examiner is rejecting claim 27 as being anticipated or rendered obvious by *Mauney*. As M.P.E.P. § 706.02 makes clear, rejections under 35 U.S.C. §§ 102 and 103 are mutually exclusive. In a proper 35 U.S.C. § 102 rejection, "[n]o question of obviousness is present." Accordingly, the Examiner's 35 U.S.C. § 102(e) rejection of claim 27 necessarily precludes a 35 U.S.C. § 103(a) rejection of that claim based on the same reference. Further, as M.P.E.P. § 706.02 makes clear, in a proper 35 U.S.C. § 103 rejection, "the reference teachings must

somehow be modified in order to meet the claims." For this reason, a 35 U.S.C. § 103(a) rejection based on *Mauney* must necessarily preclude a 35 U.S.C. § 102(e) rejection of the same claims based on the same reference. Should the Examiner continue to dispute the patentability of the pending claims, Applicant requests that the Examiner provide clarification in the next Office Action (which should <u>not</u> be final) as to the basis for rejection. The ambiguity of the rejection notwithstanding, Applicant submits the claim 27 is neither anticipated nor rendered obvious by *Mauney*, as discussed in the following sections.

Claims 1, 2, 4, 5, 7, 8, 10, 11, and 27 are not anticipated by *Mauney*. In order to properly anticipate Applicant's claimed invention under 35 U.S.C. § 102(e), each and every element of the claim in issue must be found, either expressly described or under principles of inherency, in a single prior art reference. Further, "[t]he identical invention must be shown in as complete detail as is contained in the...claim." See M.P.E.P. § 2131 (8th Ed., Aug. 2001), quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). Finally, "[t]he elements must be arranged as required by the claim." M.P.E.P. § 2131 (8th Ed. 2001), p. 2100-69.

Claim 1, as currently presented, recites a combination of elements including:

a section which sets a range for a message transmitted from the first device, wherein the message is for searching for the second device to be communicated with the first device.

Mauney fails to teach at least the above elements. The Examiner alleges (OA, page 2) that Mauney discloses "...searching the second device by creating a page message...which can be broadcast according to an inherently set range...." The relied-upon portions of Mauney mention a

¹ The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether or not any such statement is identified herein, Applicant declines to automatically subscribe to any statement or characterization in the Office Action.

"full-featured wireless handset that is capable of...operating in a direct handset-to-handset mode within a limited range..." (col. 5, lines 45-53) and determining "whether a page response message has been received indicating that the called party's wireless handset is within range" (col. 23, lines 19-32).

Mauney does not teach a section which <u>sets</u> a search range for a message. The Examiner's statement that a message is broadcast within an "inherently set range" serves only to underscore at least one distinction between claim 1 and Mauney: Mauney merely mentions that a message is sent in accordance with an operating range inherent to a handset, whereas claim 1 recites a section that <u>sets a range</u> for a message.

The Examiner further alleges (OA, page 10) that "the setting of a range for sending the message would be inherent since *Mauney* discloses that the message is communicated 'within a predetermined operating range of the handset." Applicant disagrees. That a handset may operate within a limited operating range does not portend the existence of a "a section which sets a range for a message," as claimed. That is, the mere fact that a broadcast is limited by the operating range of the associated equipment does not evidence that such equipment sets the range.

For at least the foregoing reasons, *Mauney* does not teach or suggest at least "a section which sets a range for a message transmitted from the first device, wherein the message is for searching for the second device to be communicated with the first device," as claimed.

Moreover, to the extent the Examiner contends that the features of dependent claim 8 are inherently disclosed by *Mauney*, Applicant calls attention to the following provisions of M.P.E.P. § 2112:

[t]he fact that a certain result or characteristic <u>may</u> occur or be present in the prior art is not sufficient to establish the inherency of

that result or characteristic..."To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." (internal citations omitted).

Applicant also reminds the Examiner that:

[i]n relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.

M.P.E.P. § 2112 (8th ed. 2001) (internal citations omitted).

The Office Action fails to provide sufficient evidence from *Mauney*, or any recourse to extrinsic evidence, that makes clear that the subject matter of claim 1 is *necessarily* present in the reference. Further, the Office Action fails to present sufficient factual basis and technical reasoning to demonstrate inherency. That a handset may operate within a limited operating range does not evidence that "a section which *sets* a range for a message" is *necessarily* present in *Mauney*. Consequently, the Examiner cannot properly infer that the subject matter of claim 1 is inherently disclosed by *Mauney*.

As set forth above, anticipation under 35 U.S.C. § 102(e) requires that each and every claim element be disclosed in as complete detail as is in the claim by the applied reference.

Mauney does not teach each and every feature of independent claim 1 and therefore, as a matter of law, cannot anticipate claim 1. The rejection of independent claim 1 under 35 U.S.C. §102(e) as anticipated by Mauney should therefore be withdrawn.

Independent claims 4 and 7, although of different scope, include recitations paralleling the recitations in claim 1 discussed above. In particular, claim 4 recites, *inter alia*:

setting a range for a message transmitted from the first device, wherein the message is for searching for the second device to be communicated with the first device; and claim 7 recites, inter alia:

a section which sets a range for a message, wherein the message is for searching for another device to be communicated with the apparatus through a wireless link.

For at least the reasons presented above in connection with claim 1, independent claims 4 and 7 are not anticipated by *Mauney*.

Claims 2 depends from allowable base claim 1, claim 5 depends from allowable base claim 4, and claims 8, 10, and 11 depend from claim 7. Because *Mauney* fails to teach each and every element recited in base claims 1, 4, and 7, *Mauney* also fails to teach each and every element recited in dependent claims 2, 5, 8, 10, and 11. For at least this reason, claims 2, 5, 8, 10, and 11 are allowable over *Mauney*.

Independent claim 27 recites a combination including: "determining one of a first range and a second range in relation to the position of the second device...[and] outputting a message from the first device to one of the first range and second range determined." Applicant submits that *Mauney* fails to teach *or suggest* at least these recitations. The Examiner alleges, in connection with claim 21, that *Mauney* discloses a page message "which can be broadcast according to an inherently set range" (OA, page 9). The Examiner further notes that *Mauney* mentions a "memorize feature [that] may be invoked when two handsets are near each other" (col. 52, lines 22-30, see also col. 53, lines 20-45). Sending a page message or a memorize message, however, is not consistent with "determining one of a first range and a second range in relation to the position of the second device...[and] outputting a message from the first device to one of the first range and second range determined," as claimed. That is to say, transmitting one of two different messages, as mentioned by *Mauney*, is not the same as outputting a single message at a determined one of two ranges, as recited in claim 27, even if those two messages (mentioned by *Mauney*) are transmitted at different ranges. In fact, the Examiner concedes (OA,

page 9) that *Mauney* "fails to disclose that the two messages are the same." For at least these reasons, *Mauney* fails to anticipate claim 27. *Mauney* also fails to render claim 27 obvious, for at least the reasons presented below in connection with claim 21, which, although of different scope, includes recitations similar to those in claim 27.

Accordingly, Applicant requests withdrawal of the rejection of claims 1, 2, 4, 5, 7, 8, 10, 11, and 27 under 35 U.S.C. § 102(e) and the timely allowance of those claims.

Rejection of claims 21, 22, 24, and 25 under 35 U.S.C. § 103(a)

A *prima facie* case of obviousness has not been established with respect to claims 21, 22, 24, and 25 based on *Mauney*. To establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), each of three requirements must be met. First, the references, taken alone or in combination, must teach or suggest each and every element recited in the claims. See M.P.E.P. § 2143.03 (8th ed. 2001). Second, there must be some suggestion or motivation, either in the reference(s) or in the knowledge generally available to one of ordinary skill in the art, to combine or modify the reference(s) in a manner resulting in the claimed invention. Third, a reasonable expectation of success must exist. Moreover, each of these requirements must "be found in the prior art, and not be based on applicant's disclosure." M.P.E.P. § 2143 (8th ed. 2001).

A prima facie case of obviousness has not been established because, among other things, Mauney fails to teach or suggest each and every element recited in the claims.

For example, claim 21 recites a combination including:

...a first outputting section for outputting a message to a first range in which the second device and an external device are positioned,

a second outputting section for outputting the message to a second range in which the second device is positioned, the external device positioning out of the second range, and a section which selects one of the first outputting section and the second outputting section.

Mauney fails to teach or suggest at least the above-noted elements. Transmitting one of two different messages (i.e., a page message or a memorize message), as mentioned by Mauney, is not the same as outputting a message at a selected one of two ranges, as recited in claim 21, even if the two messages mentioned by Mauney are transmitted at different ranges. Although Mauney mentions a memorize message that may be sent to other devices in close proximity, the reference does not teach or suggest at least selecting one of a first outputting section for outputting a message to a first range and a second outputting section for outputting the message to a second range, as claimed. In fact, the Examiner concedes (OA, page 9) that Mauney "fails to disclose that the two messages are the same."

Contrary to the Examiner's position, the claim elements missing from *Mauney* would not have been obvious. According to the Examiner, "such a modification would have been an obvious engineering decision....[that] would allow the same message format for FIND and MEMORIZE messages and reduce signaling complexity" (OA, page 9). Applicant disagrees with the Examiner's allegation for at least the following reasons.

Determinations of *prima facie* obviousness must be supported by a finding of "substantial evidence." *See In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001). Specifically, unless "substantial evidence" found in the record supports the factual determinations central to the issue of patentability, including motivation, the rejection is improper and should be withdrawn.

In this case, there is no "substantial evidence" in the record to support the attempted modification of *Mauney*, and the requisite "clear and particular" motivation to support a *prima* facie case of obviousness is lacking. The Examiner has not established, by substantial evidence,

that a skilled artisan having the *Mauney* before him would have been motivated to modify the reference in a manner resulting in Applicant's claimed invention. The conclusory statement that "such a modification would have been an obvious engineering decision" is wholly unsupported by substantial evidence and does not show the requisite motivation. Further, the Examiner's allegation that modifying *Mauney* "would allow the same message format for FIND and MEMORIZE messages and reduce signaling complexity" is not supported and does not show the requisite motivation. The Examiner fails to provide any explanation or reasoning to show how modifying the reference would, for example, "reduce signaling complexity." The Examiner also fails to point out any mention of such effects in the relied-on reference. Regardless of whether the alleged result would in fact occur from the modification and whether the modification would in fact yield the elements of claim 21 (which Applicant maintains would not), the requisite motivation to modify is lacking. Applicant submits that a skilled artisan would not have been motivated to modify *Mauney* to "reduce signaling complexity" or achieve any other result.

Applicant calls attention to M.P.E.P. § 2143.01, which makes clear that

The mere fact that references <u>can</u> be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination (citations omitted)...[and]

The Office Action does not show that *Mauney* "suggests the desirability of the" modification. The Office Action provides no objective reason why, other than to attempt to meet the terms of the claims, a skilled artisan would have been motivated to combine the references.

And as M.P.E.P. § 2142 articulates:

Knowledge of applicant's disclosure must be put aside ...impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.

For at least the foregoing reasons, a *prima facie* case of obviousness has not been established with respect to claim 21. Applicant therefore deems claim 1 patentable over the applied reference.

Independent claim 24, although of different scope, includes recitations similar to those in claim 21 discussed above. In particular, claim 24 recites, *inter alia*:

a first outputting section which outputs a message to a first range in relation to a position of the external device, the message being used to set the wireless link;

a second outputting section which outputs the message to a second range different from the first range; and

a section which selects one of the first outputting section and the second outputting section.

For at least the reasons given above in connection with claim 21, claim 24 is allowable. Claims 22 and 25 depend on claims 21 and 24, respectively. Claims 22 and 25 are patentable for at least the same reasons as presented for base claims 21 and 24. Accordingly, Applicant requests withdrawal of the rejection under 35 U.S.C. § 103(a) and the timely allowance of claims 21, 22, 24, and 25.

Rejection of claims 3, 6, 9, 12-20, 23, 26, and 28 under 35 U.S.C. § 103(a)

A prima facie case of obviousness has not been established with respect to claims 3, 6, 9, 12-20, 23, 26, and 28 based on *Mauney* and *Werling* for at least the following reasons.

Claims 3 depends from allowable base claim 1; claim 6 depends from allowable base claim 4; and claim 9 depends from allowable base claim 7. Claims 3, 6, and 9 therefore include all of the elements recited in base claims 1, 4, and 7, respectively. As explained above, *Mauney* fails to teach or suggest each and every element recited in claims 1, 4, and 7. *Mauney*, therefore, fails to teach or suggest each and every element recited in claims 3, 6, and 9.

Werling does not cure the deficiencies of Mauney. Werling is directed to "avoiding the emission of radio waves in the direction of human tissue" (col. 1, lines 65-66). Werling does not teach or suggest at least "a section which sets a range for a message transmitted from the first device, wherein the message is for searching for the second device to be communicated with the first device," as recited in claim 1. Nor does the reference teach or suggest the parallel recitations in claims 4 and 7. Accordingly, even if Mauney and Werling could be properly combined—to which Applicant does not acquiesce—the resultant combination would not yield each and every element recited in base claims 1, 4, and 7 and also recited in dependent claims 3², 6, and 9. For at least this reason, a prima facie case of obviousness has not been established with respect to claims 3, 6, and 9.

Independent claim 12, as currently presented, recites a combination including "a main body which sets a range for the message transmitted from the first device and which outputs first control information in accordance with the set range." As explained above, *Mauney* does not teach or suggest at least this recitation and *Werling* fails to cure *Mauney*'s deficiencies³. *Mauney* does not teach or suggest at least "a main body which sets a range for the message transmitted from the first device and which outputs first control information in accordance with the set range," as claimed. Thus, even if *Mauney* and *Werling* could be combined—to which Applicant

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The Examiner concedes (OA, page 5) that *Mauney* fails to disclose "wherein the [set] range...is a directivity of the message transmitted from the first device," as claimed. In rejecting claim 3 (and also claims 23, 26, and 28), the Examiner relies on *Werling* in an attempt to cure *Mauney*'s deficiencies. Although Applicant notes other elements of claim 3 that distinguish the claim from the references, Applicant does not acquiesce to the Examiner's allegations (e.g., OA, page 5) regarding the combination of *Mauney* and *Werling* as applied to this recitation.

³ The Examiner concedes (OA, page 7) that *Mauney* fails to disclose "an antenna control section, connected to the controller and the antenna, which controls an antenna directivity of the antenna based on the second control information output from the controller," as claimed. In rejecting claim 12, the Examiner relies on *Werling* in an attempt to cure *Mauney*'s deficiencies. Although Applicant notes other elements of claim 12 that distinguish the claim from the references, Applicant does not acquiesce to the Examiner's allegations (e.g., OA, page 7) regarding the claimed "antenna control section."

does not acquiesce—the resultant combination would not yield each and every element recited in claim 12.

Independent claim 16 recites, inter alia:

setting a range for a message transmitted from the first device in a main body of the first device and outputting first control information in accordance with the set range from the main body, wherein the message is for searching for the second device;

and independent claim 17 recites, inter alia:

a main body which sets a range for a message transmitted from the communication apparatus and which outputs control information in accordance with the set range, wherein the message is for searching for a device as a connection target by radio communication.

Independent claims 16 and 17, although each of different scope than claim 12, are allowable for at least the same reasons as presented above in connection with claim 12.

Claims 13-15 depend from claim 12, claims 18-20 depend from claim 17, claim 23 depends from claim 21, claim 26 depends from claim 24, and claim 28 depends from claim 27. Claims 13-15, 18-20, 23, 26, and 28 are allowable for at least the same reasons as presented above in connection with allowable base claims 12, 17, 21, 24, and 27. Accordingly, Applicant requests withdrawal of the rejection under 35 U.S.C. § 103(a) and the timely allowance of claims 3, 6, 9, 12-20, 23, 26, and 28.

New claims

New independent claim 29 recites a combination including:

a section which sets a variable search range for a message transmitted from the first device, wherein the message is for searching for the second device to be communicated by the first device.

Mauney and Werling, either taken alone or in any combination, fail to teach or suggest at least the above-noted recitations. Applicant therefore requests the timely allowance of new claim 29.

New independent claim 30 recites a combination of elements including:

a section which sets a user-designated search range for a message transmitted from the first device, wherein the message is for searching for the second device to be communicated by the first device.

Mauney and Werling, either taken alone or in any combination, fail to teach or suggest at least the above-noted recitations. Applicant therefore requests the timely allowance of claim 30.

For at least the foregoing reasons, Applicant requests the timely allowance of new claims 29 and 30.

Conclusion

In view of the foregoing, Applicant respectfully requests the reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Dated: April 1, 2004

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